

FIG. 1

- 101 .. DATA UPDATING SYSTEM
- 102 .. TERMINAL (DATA UPDATING DEVICE)
- 103 .. EXTERNAL STORAGE MEDIUM
- 104 .. IN-TERMINAL DATA STORING PORTION
- 106 .. CONTROLLER
- 107 .. POST-UPDATE DATA RESTORING PORTION
- 108 .. IN-TERMINAL DATA READING/WRITING PORTION
- 109 .. UPDATE DATA READING PORTION
- 110 .. UPDATE PERMISSION JUDGING PORTION
- 111 .. UPDATE FREQUENCY UPDATING PORTION
- 112 .. UPDATE FREQUENCY DATA STORING PORTION
- 113 .. UPDATE DATA STORING PORTION

Fig. 2

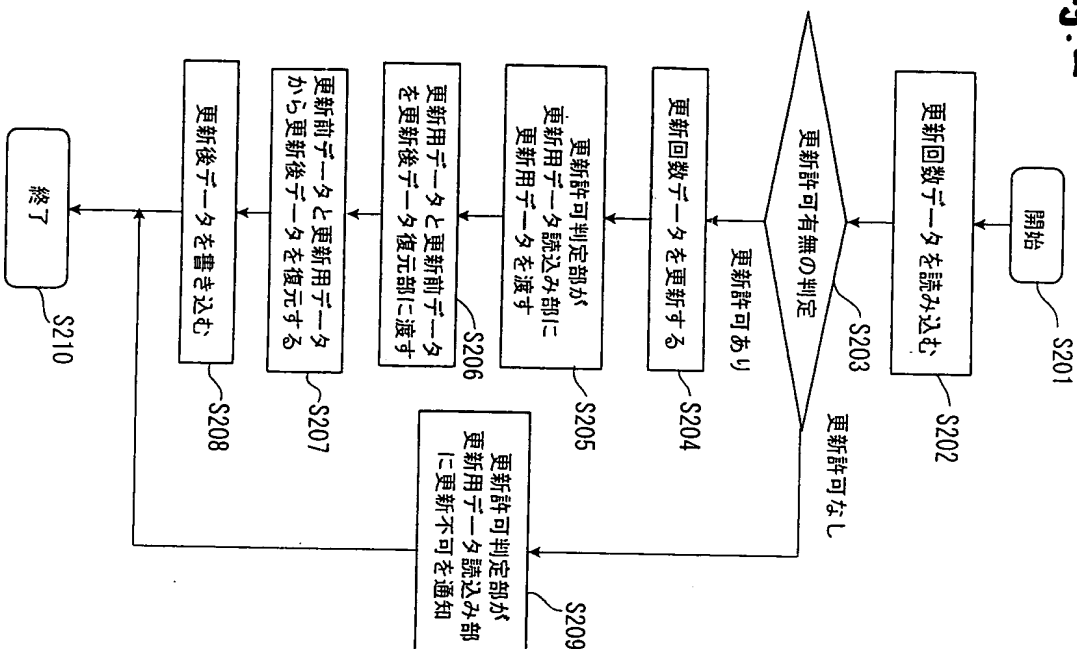


FIG. 2

S201 .. START

S202 .. READ UPDATE FREQUENCY DATA

S203 .. PRESENCE OR ABSENCE OF UPDATE PERMISSION IS JUDGED ?

NO UPDATE PERMISSION

UPDATE PERMISSION

S204 .. UPDATE UPDATE-FREQUENCY DATA

S205 .. UPDATE PERMISSION JUDGING PORTION DELIVERS UPDATE DATA TO UPDATE DATA READING PORTION

S206 .. DELIVER UPDATE DATA AND PRE-UPDATE DATA TO POST-UPDATE DATA READING PORTION

S207 .. RESTORE POST-UPDATE DATA FROM PRE-UPDATE DATA AND UPDATE DATA

S208 .. WRITE POST-UPDATE DATA

S209 .. UPDATE PERMISSION JUDGING PORTION NOTIFIES UPDATE DATA READING PORTION OF UPDATE-IMPOSSIBILITY

S210 .. END

Fig. 3

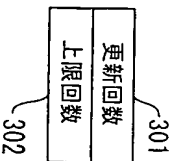


FIG. 3

301 .. UPDATE FREQUENCY

302 .. UPPER LIMIT FREQUENCY

FIG. 4

S401 .. START JUDGMENT OF PRESENCE OR ABSENCE OF UPDATE PERMISSION

S402 .. READ UPDATE FREQUENCY AND UPPER LIMIT FREQUENCY

S403 .. UPDATE FREQUENCY IS LESS THAN UPPER LIMIT FREQUENCY?

S404 .. JUDGE PRESENCE OF UPDATE PERMISSION

S405 .. JUDGE ABSENCE OF UPDATE PERMISSION

S406 .. END JUDGMENT OF PRESENCE OR ABSENCE OF UPDATE PERMISSION

Fig. 4

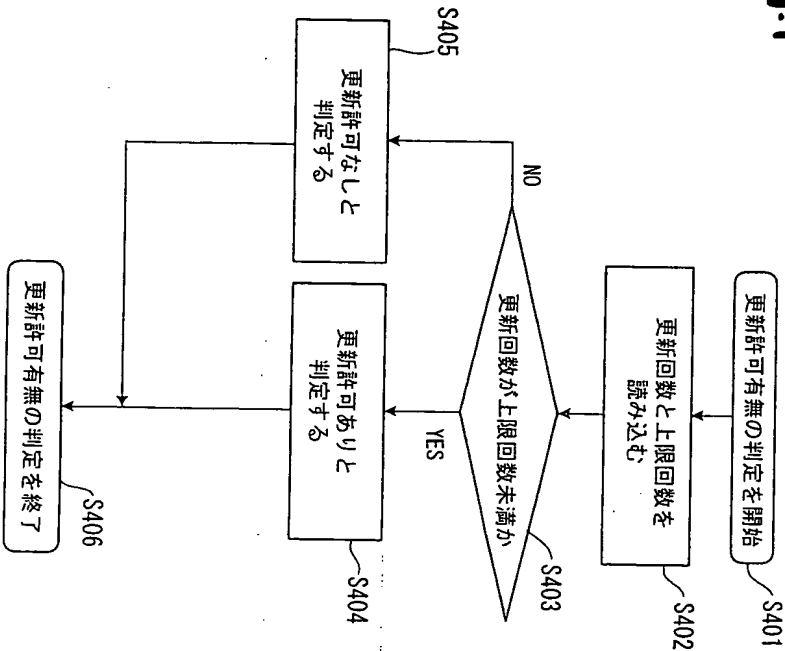


Fig. 5

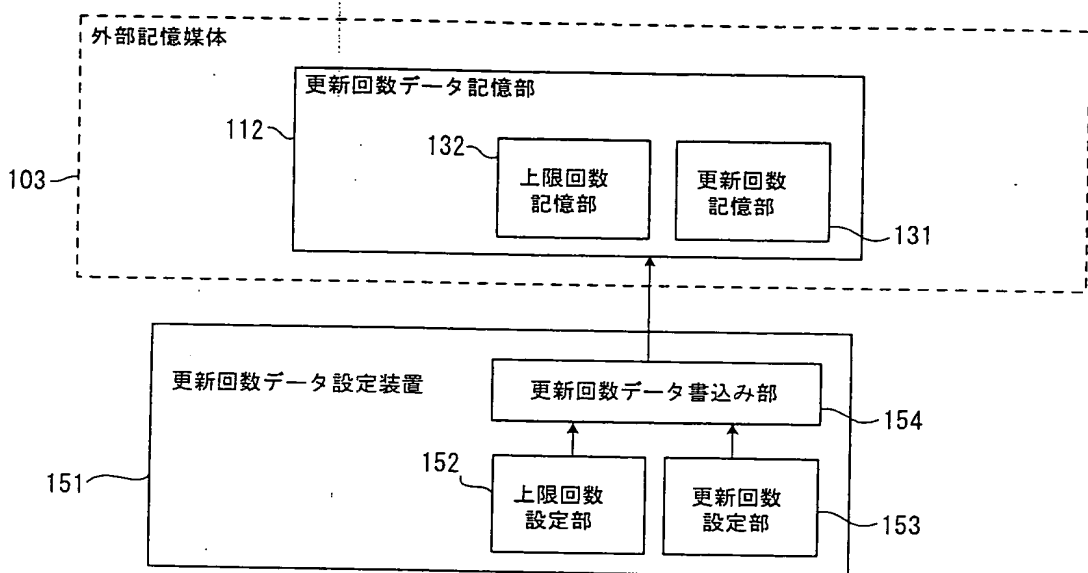


FIG. 5

- 103 .. EXTERNAL STORAGE MEDIUM
- 112 .. UPDATE FREQUENCY DATA STORING PORTION
- 131 .. UPDATE FREQUENCY STORING PORTION
- 132 .. UPPER LIMIT FREQUENCY STORING PORTION
- 151 .. UPDATE FREQUENCY DATA SETTING DEVICE
- 152 .. UPPER LIMIT FREQUENCY SETTING PORTION
- 153 .. UPDATE FREQUENCY SETTING PORTION
- 154 .. UPDATE FREQUENCY DATA WRITING PORTION

Fig. 6

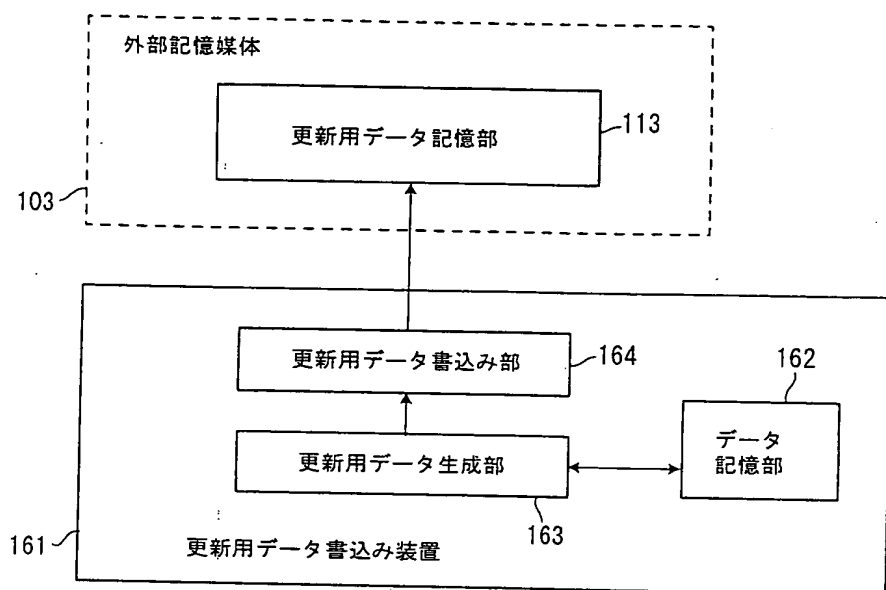


FIG. 6

103 .. EXTERNAL STORAGE MEDIUM
 113 .. UPDATE DATA STORING PORTION
 161 .. UPDATE DATA WRITING DEVICE
 162 .. DATA STORING PORTION
 163 .. UPDATE DATA GENERATING PORTION 163
 164 .. UPDATE DATA WRITING PORTION

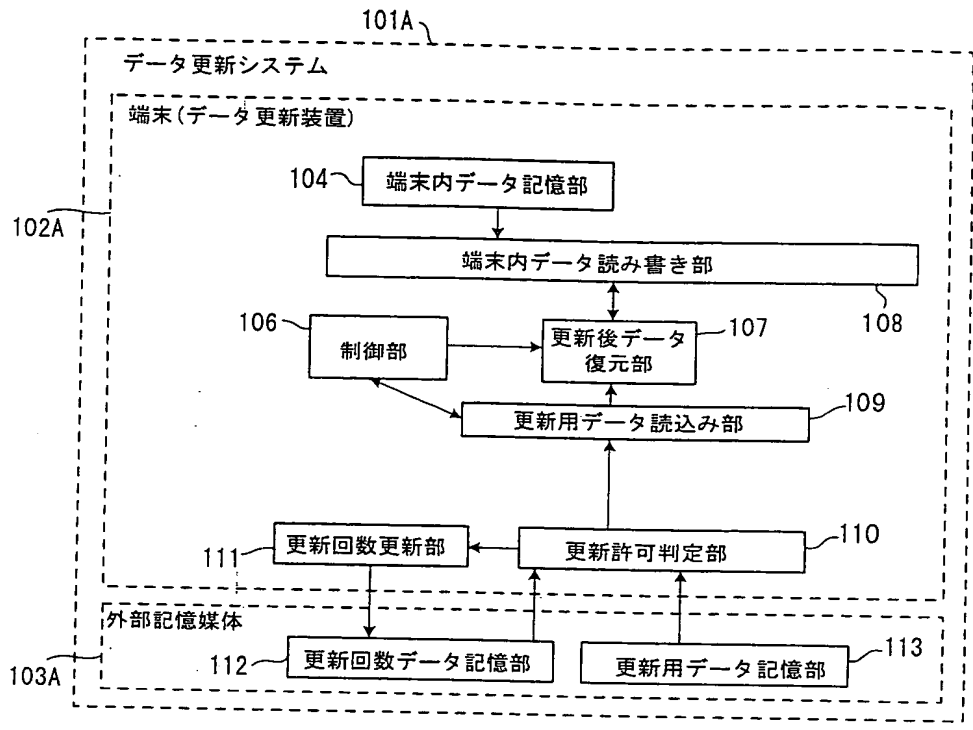


FIG. 7

- 101A .. DATA UPDATING SYSTEM
- 102A .. TERMINAL (DATA UPDATING DEVICE)
- 103A .. EXTERNAL STORAGE MEDIUM
- 104 .. IN-TERMINAL DATA STORING PORTION
- 106 .. CONTROLLER
- 107 .. POST-UPDATE DATA RESTORING PORTION
- 108 .. IN-TERMINAL DATA READING/WRITING PORTION
- 109 .. UPDATE DATA WRITING PORTION
- 110 .. UPDATE PERMISSION JUDGING PORTION
- 111 .. UPDATE FREQUENCY UPDATING PORTION
- 112 .. UPDATE FREQUENCY DATA STORING PORTION
- 113 .. UPDATE DATA STORING PORTION

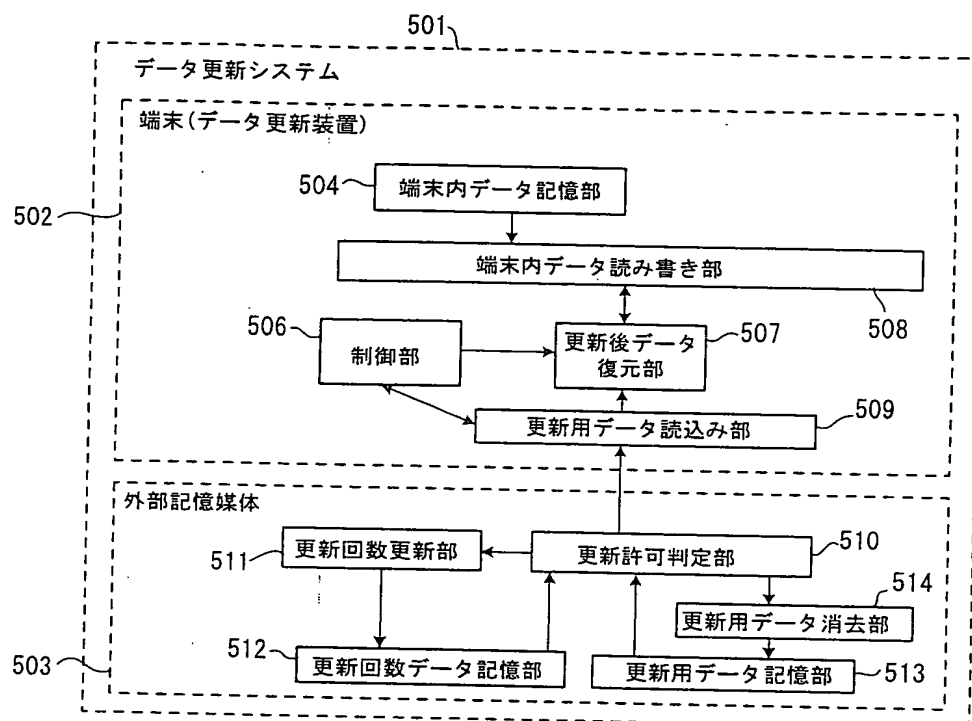


FIG. 8

- 501 .. DATA UPDATING SYSTEM
- 502 .. TERMINAL (DATA UPDATING DEVICE)
- 503 .. EXTERNAL STORAGE MEDIUM
- 504 .. IN-TERMINAL DATA STORING PORTION
- 506 .. CONTROLLER
- 507 .. POST-UPDATE DATA RESTORING PORTION
- 508 .. IN-TERMINAL DATA READING/WRITING PORTION
- 509 .. UPDATE DATA READING PORTION
- 510 .. UPDATE PERMISSION JUDGING PORTION
- 511 .. UPDATE FREQUENCY UPDATING PORTION
- 512 .. UPDATE FREQUENCY DATA STORING PORTION
- 513 .. UPDATE DATA STORING PORTION
- 514 .. UPDATE DATA DELETING PORTION

Fig. 9

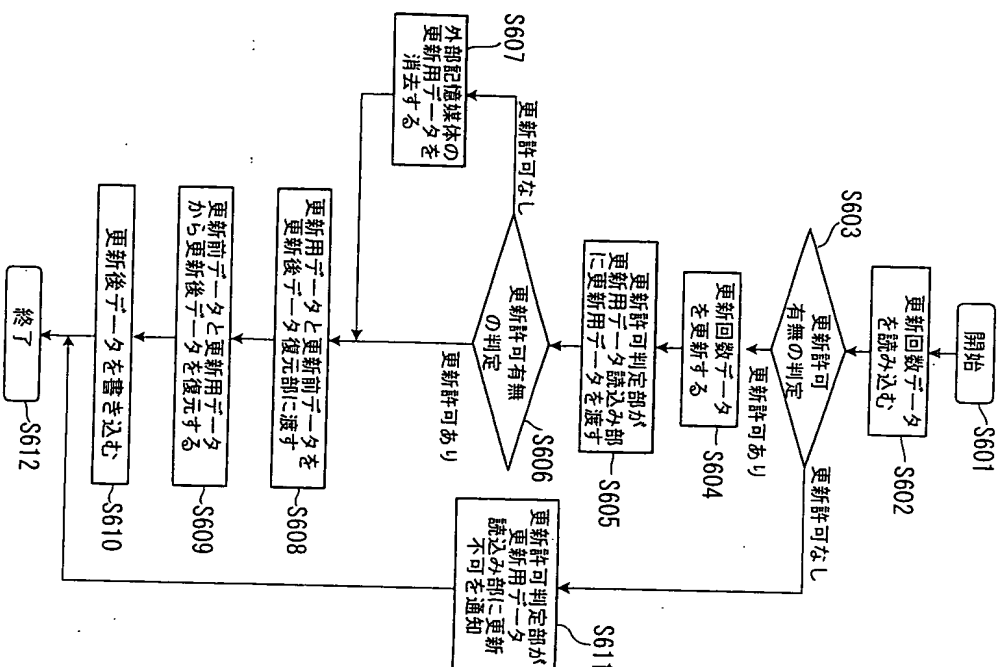


FIG. 9

- S601 .. START
- S602 .. READ UPDATE FREQUENCY DATA
- S603 .. PRESENCE OR ABSENCE OF UPDATE PERMISSION IS JUDGED ?
 - NO UPDATE PERMISSION
 - UPDATE PERMISSION
- S604 .. UPDATE UPDATE-FREQUENCY DATA
- S605 .. UPDATE PERMISSION JUDGING PORTION DELIVERS UPDATE DATA TO UPDATE DATA READING PORTION
- S606 .. PRESENCE OR ABSENCE OF UPDATE PERMISSION IS JUDGED
 - NO UPDATE PERMISSION
 - UPDATE PERMISSION
- S607 .. DELETE UPDATE DATA OF EXTERNAL STORAGE MEDIUM
- S608 .. DELIVER UPDATE DATA AND PRE-UPDATE DATA TO POST-UPDATE DATA RESTORING PORTION
- S609 .. RESTORE POST-UPDATE DATA FROM PRE-UPDATE DATA AND UPDATE DATA
- S610 .. WRITE POST-UPDATE DATA
- S611 .. UPDATE PERMISSION JUDGING PORTION NOTIFIES UPDATE DATA READING PORTION OF UPDATE IMPOSSIBILITY
- S612 .. END

Fig. 10

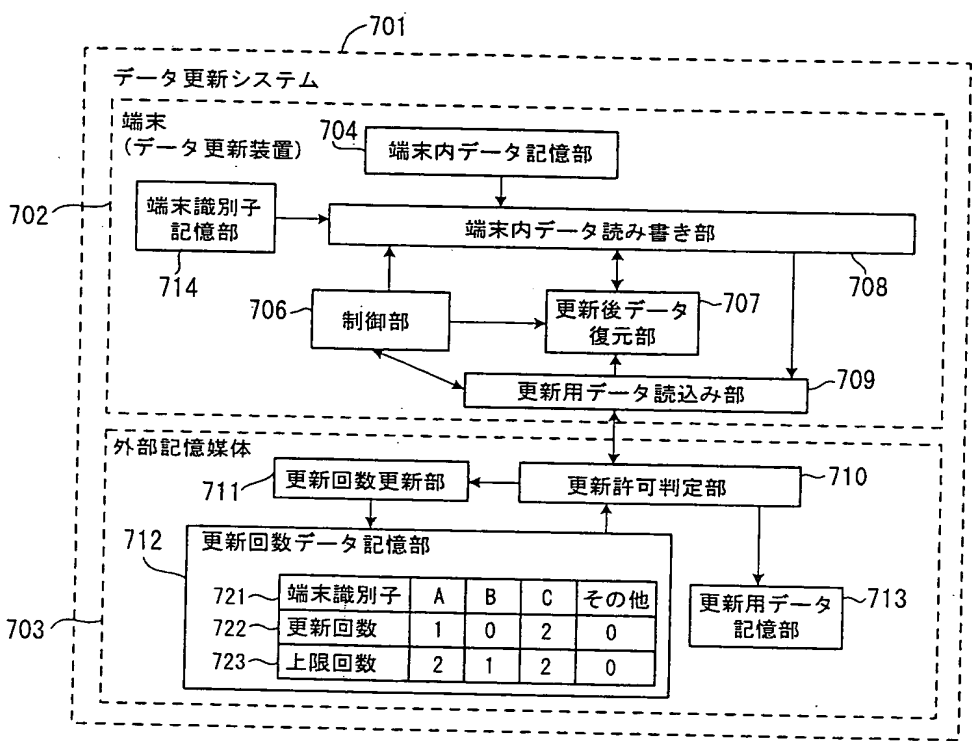


FIG. 10

- 701 .. DATA UPDATING SYSTEM
- 702 .. TERMINAL (DATA UPDATING DEVICE)
- 703 .. EXTERNAL STORAGE MEDIUM
- 704 .. IN-TERMINAL DATA STORING PORTION
- 706 .. CONTROLLER
- 707 .. POST-UPDATE DATA RESTORING PORTION
- 708 .. IN-TERMINAL DATA READING/WRITING PORTION
- 709 .. UPDATE DATA READING PORTION
- 710 .. UPDATE PERMISSION JUDGING PORTION
- 711 .. UPDATE FREQUENCY UPDATING PORTION
- 712 .. UPDATE FREQUENCY DATA STORING PORTION
- 713 .. UPDATE DATA STORING PORTION
- 714 .. TERMINAL IDENTIFYING STORING PORTION
- 721 .. TERMINAL IDENTIFIER OTHERS
- 722 .. UPDATE FREQUENCY
- 723 .. UPPER LIMIT FREQUENCY

図11
Fig. 11

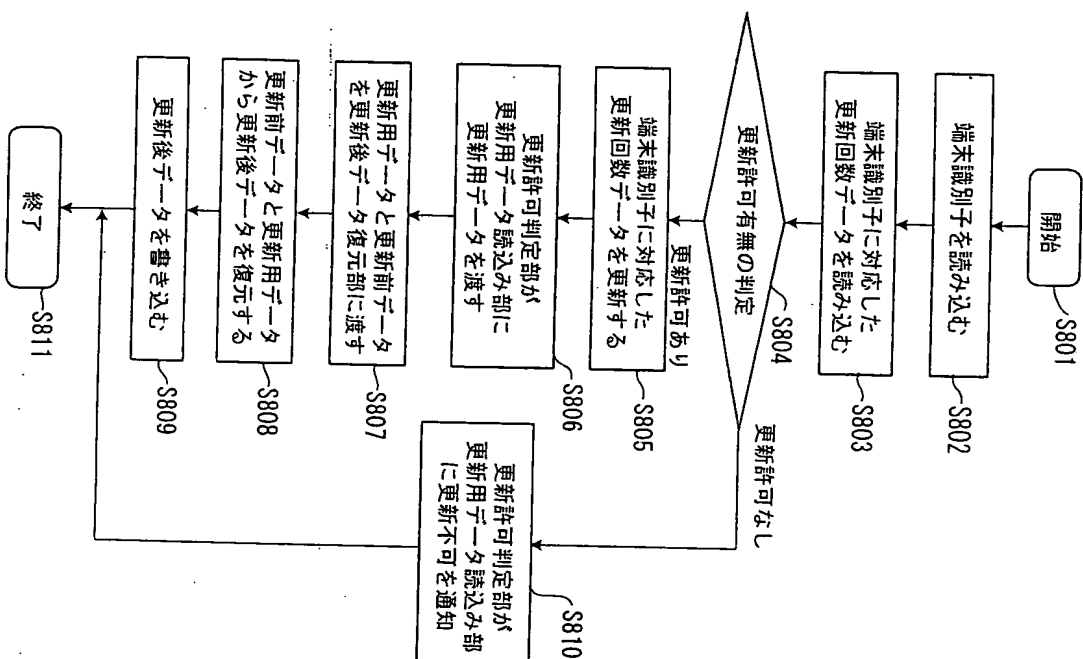


FIG. 11

- S801 .. START
- S802 .. READ TERMINAL IDENTIFIER
- S803 .. READ UPDATE FREQUENCY DATA CORRESPONDING TERMINAL IDENTIFIER
- S804 .. PRESENCE OR ABSENCE OF UPDATE PERMISSION IS JUDGED ?
 - NO UPDATE PERMISSION
 - UPDATE PERMISSION
- S805 .. UPDATE UPDATE-FREQUENCY DATA CORRESPONDING TO TERMINAL IDENTIFIER
- S806 .. UPDATE PERMISSION JUDGING PORTION DELIVERS UPDATE DATA TO UPDATE DATA READING PORTION
- S807 .. DELIVER UPDATE DATA AND PRE-UPDATE DATA TO POST-UPDATE DATA RESTORING PORTION
- S808 .. RESTORE POST-UPDATE DATA FROM PRE-UPDATE DATA AND UPDATE DATA
- S809 .. WRITE POST-UPDATE DATA
- S810 .. UPDATE PERMISSION JUDGING PORTION NOTIFIES UPDATE DATA READING PORTION OF UPDATE IMPOSSIBILITY
- S811 .. END

Fig. 12

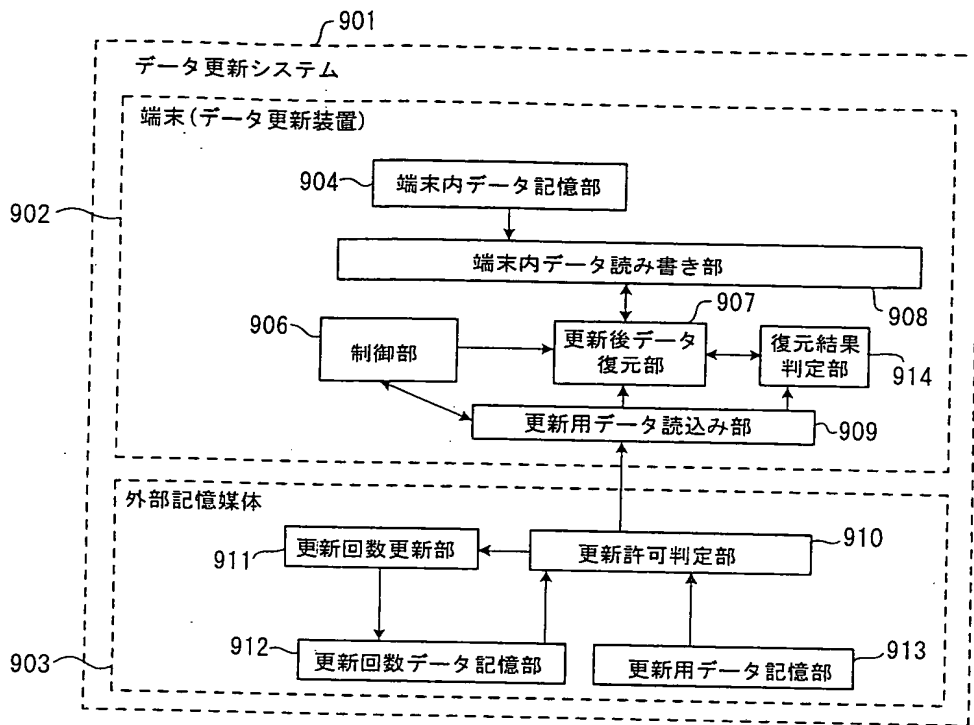


FIG. 12

- 901 .. DATA UPDATING SYSTEM
- 902 .. TERMINAL (DATA UPDATING DEVICE)
- 903 .. EXTERNAL STORAGE MEDIUM
- 904 .. IN-TERMINAL DATA STORING PORTION
- 906 .. CONTROLLER
- 907 .. POST-UPDATE DATA RESTORING PORTION
- 908 .. IN-TERMINAL DATA READING/WRITING PORTION
- 909 .. UPDATE DATA READING PORTION
- 910 .. UPDATE PERMISSION JUDGING PORTION
- 911 .. UPDATE FREQUENCY UPDATING PORTION
- 912 .. UPDATE FREQUENCY DATA STORING PORTION
- 913 .. UPDATE DATA STORING PORTION
- 914 .. RESTORATION RESULT JUDGING PORTION

Fig.13

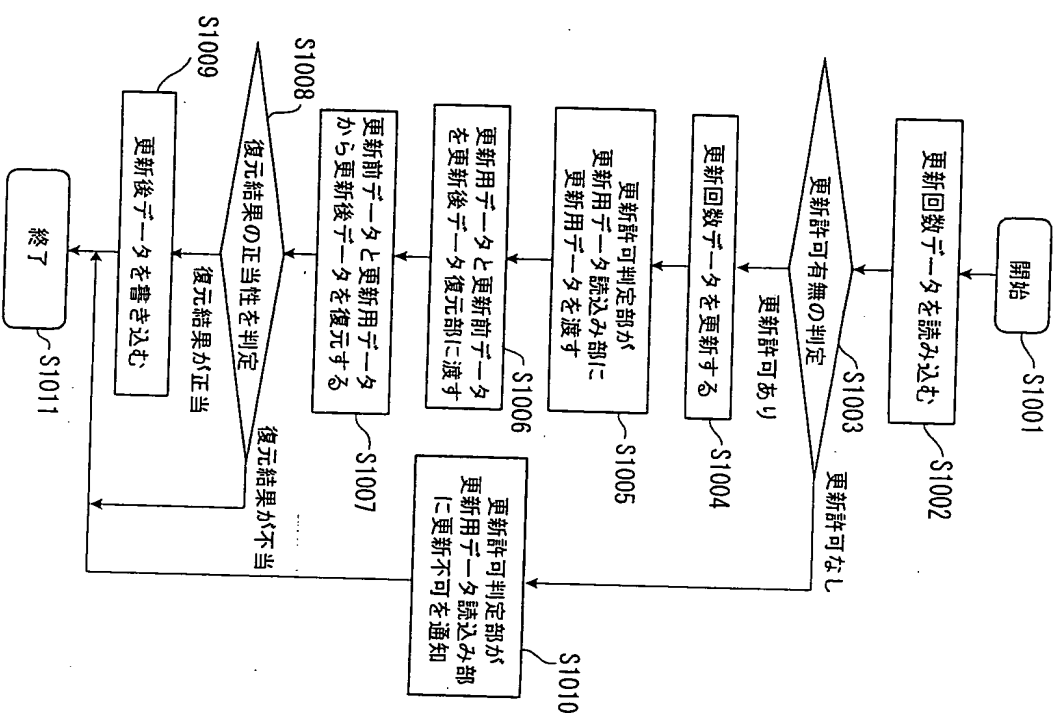


FIG. 13

S1001 .. START

S1002 .. READ UPDATE FREQUENCY DATA

S1003 .. PRESENCE OR ABSENCE OF UPDATE PERMISSION IS JUDGED ?

NO UPDATE PERMISSION

UPDATE PERMISSION

S1004 .. UPDATE UPDATE-FREQUENCY DATA

S1005 .. UPDATE PERMISSION JUDGING PORTION DELIVERS UPDATE DATA TO UPDATE DATA READING PORTION

S1006 .. DELIVER POST-UPDATE DATA RESTORING PORTION TO UPDATE DATA AND PRE-UPDATE DATA

S1007 .. RESTORE POST-UPDATE DATA FROM PRE-UPDATE DATA AND UPDATE DATA

S1008 .. PERTINENCE OF RESTORATION RESULT IS JUDGED

RESTORATION RESULT IS INADEQUACY

RESTORATION RESULT IS PERTINENCE

S1009 .. WRITE POST-UPDATE DATA

S1010 .. UPDATE PERMISSION JUDGING PORTION NOTIFIES UPDATE DATA READING PORTION OF UPDATE IMPOSSIBILITY

S1011 .. END

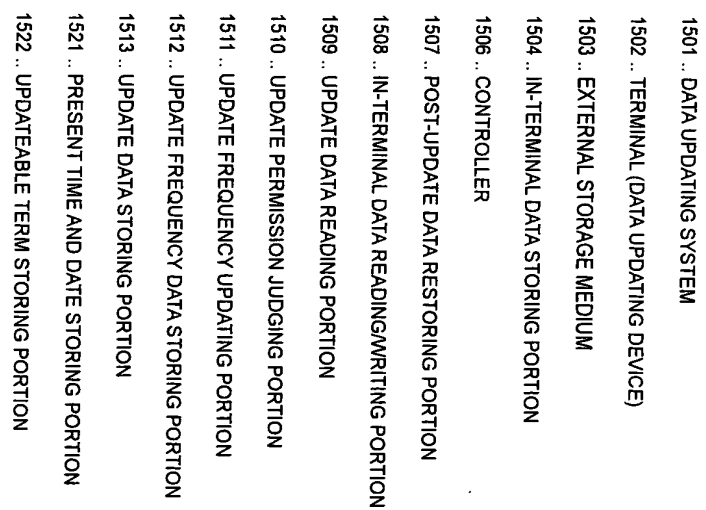


FIG. 15

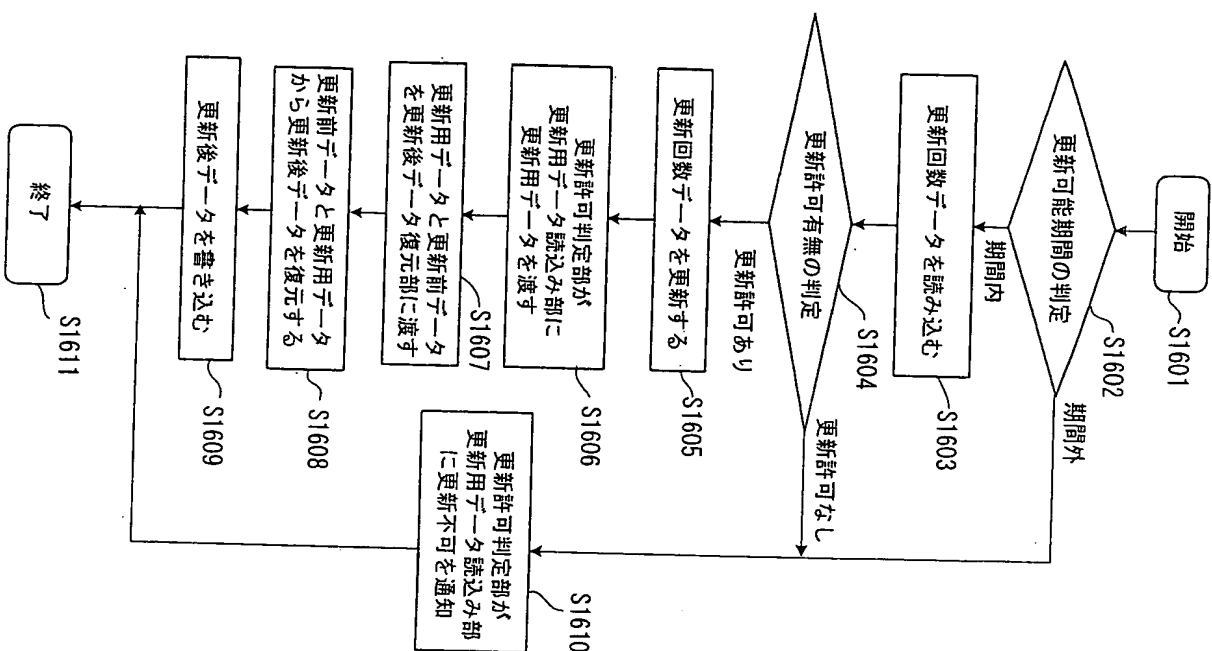


FIG. 15

S1601 .. START

S1602 .. UPDATABLE TERM IS JUDGED ?

OUT OF TERM

WITHIN TERM

S1603 .. READ UPDATE FREQUENCY DATA

S1604 .. PRESENCE OR ABSENCE OF UPDATE PERMISSION IS JUDGED ?

NO UPDATE PERMISSION

UPDATE PERMISSION

S1605 .. UPDATE UPDATE-FREQUENCY DATA

S1606 .. UPDATE PERMISSION JUDGING PORTION DELIVERS UPDATE DATA TO UPDATE DATA READING PORTION

S1607 .. DELIVER UPDATE DATA AND PRE-UPDATE DATA TO POST-UPDATE DATA RESTORING PORTION

S1608 .. RESTORE POST-UPDATE DATA FROM PRE-UPDATE DATA AND UPDATE DATA

S1609 .. WRITE POST-UPDATE DATA

S1610 .. UPDATE PERMISSION JUDGING PORTION NOTIFIES UPDATE DATA READING PORTION OF UPDATE IMPOSSIBILITY

S1611 .. END

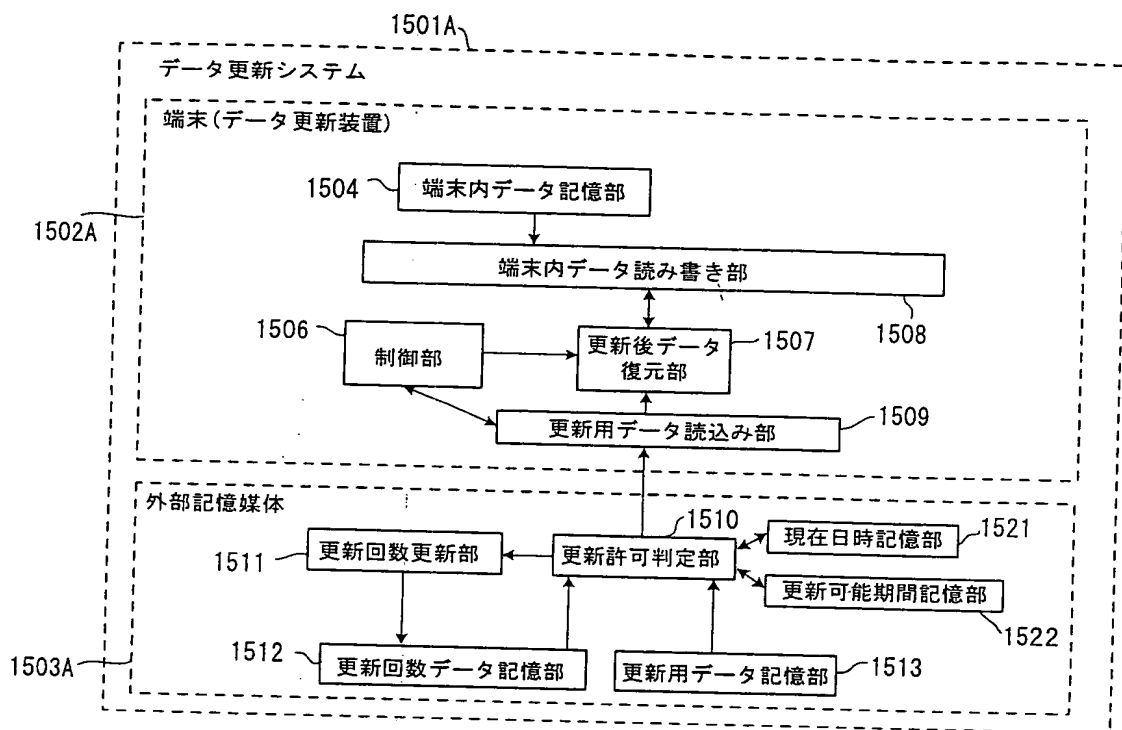


FIG. 16

- 1501A .. DATA UPDATING SYSTEM
- 1502A .. TERMINAL (DATA UPDATING DEVICE)
- 1503A .. EXTERNAL STORAGE MEDIUM
- 1504 .. IN-TERMINAL DATA STORING PORTION
- 1506 .. CONTROLLER
- 1507 .. POST-UPDATE DATA RESTORING PORTION
- 1508 .. IN-TERMINAL DATA READING/WRITING PORTION
- 1509 .. UPDATE DATA READING PORTION
- 1510 .. UPDATE PERMISSION JUDGING PORTION
- 1511 .. UPDATE FREQUENCY UPDATING PORTION
- 1512 .. UPDATE FREQUENCY DATA STORING PORTION
- 1513 .. UPDATE DATA STORING PORTION
- 1521 .. PRESENT TIME AND DATE STORING PORTION
- 1522 .. UPDATABLE TERM STORING PORTION

Fig. 17

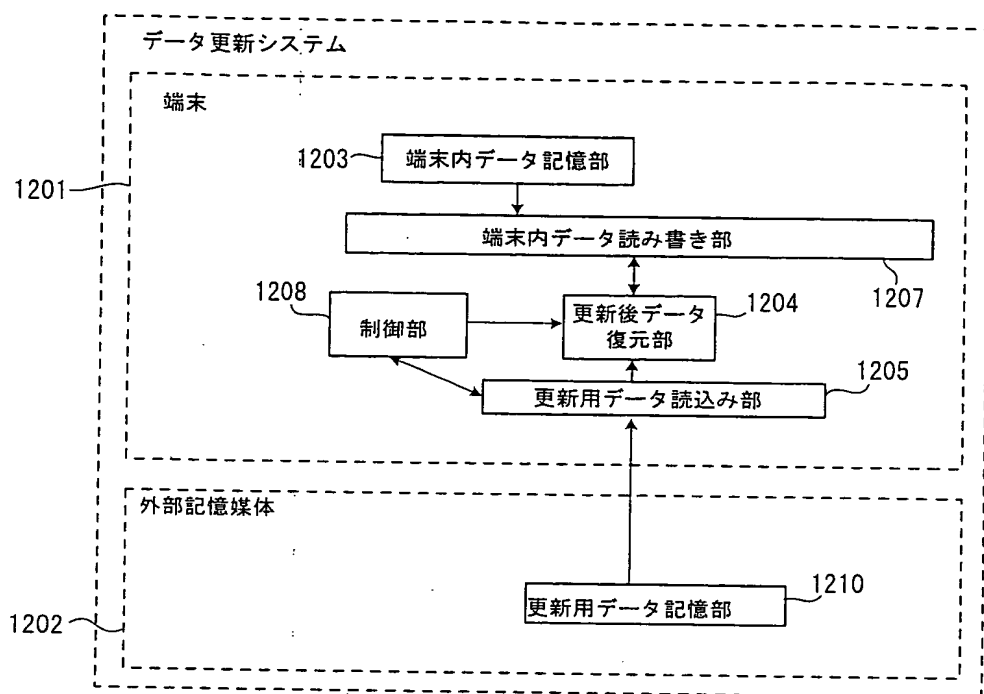


FIG. 17

DATA UPDATING SYSTEM

1201 .. TERMINAL

1202 .. EXTERNAL STORAGE MEDIUM

1203 .. IN-TERMINAL DATA STORING PORTION

1204 .. POST-UPDATE DATA RESTORING PORTION

1205 .. UPDATE DATA READING PORTION

1207 .. IN-TERMINAL DATA READING/WRITING PORTION

1208 .. CONTROLLER

1210 .. UPDATE DATA STORING PORTION